

NOTIFICATION OF ADDENDUM

ADDENDUM NO. 1

DATED 9/02/2009

Control	0252-01-070
Project	STP 2010(111)
Highway	US 281
County	BURNET

Ladies/Gentlemen:

Attached please find an addendum on the above captioned project. Included in the attachment is an addendum notification which details the changes and the respective proposal pages which were added and/or changed.

Except for new bid insert pages, it is unnecessary to return any of the pages attached.

Bid insert pages must be returned with the bid proposal submitted to the Department, unless your firm is submitting a bid using a computer print out. The computer print out must be changed to reflect the new bid item information.

Contractors and material suppliers, etc. who have previously been furnished informational proposals are not being furnished a copy of the addendum. If you have a subcontractor on the above project, please advise them of this addendum. Acknowledgment of this addendum is not requested if your company has been issued a proposal stamped "This Proposal Issued for Informational Purposes."

You are required to acknowledge receipt of this addendum on the Addendum Acknowledgement form contained in your bid proposal by placing a mark in the box next to the respective addendum.

Failure to Acknowledge receipt of this addendum in your bid proposal will result in your bid not being read.

SUBJECT: PLANS AND PROPOSAL ADDENDUMS

PROJECT: STP 2010(111)

CONTROL: 0252-01-070

COUNTY: BURNET

LETTING: 09/09/2009

REFERENCE NO: 0901

PROPOSAL ADDENDUMS

_ PROPOSAL COVER

X BID INSERTS (SH. NO.: 1-9, 2-9, AND 4-9)

X GENERAL NOTES (SH. NO.: A, H, J, L, M)

_ SPEC LIST (SH. NO.:)

_ SPECIAL PROVISIONS:

ADDED:

DELETED:

_ SPECIAL SPECIFICATIONS:

ADDED:

DELETED:

X OTHER: PLAN SHEETS

DESCRIPTION OF ABOVE CHANGES

(INCLUDING PLANS SHEET CHANGES)

BID INSERTS-

REMOVED THE FOLLOWING BID ITEMS: 132-2003, 247-2041, 340-2231

ADDED THE FOLLOWING BID ITEMS: 132-2005, 247-2366, 340-2048

REVISED QUANTITY FOR THE FOLLOWING BID ITEMS: 466-2140, 500-2001

BID INSERT SHEETS 1-9, 2-9, AND 4-9 CHANGED AS A RESULT OF THE ABOVE
QUANTITY REVISIONS

GENERAL NOTES-

SHEET A: REVISED GRADE TYPE AND QUANTITY FOR ITEM 247 IN BASIS OF ESTIMATE

SHEET A: REMOVED 'S' FROM ITEM 340 HOT MIX IN BASIS OF ESTIMATE

SHEET H: REVISED NOTE TO ITEM 132

DESCRIPTION OF ABOVE CHANGES

(INCLUDING PLANS SHEET CHANGES)

(CONTINUED)

SHEET J: CHANGED FLEX BASE TO GR 5 UNDER ITEM 247

SHEETS L, M: REVISED NOTES TO ITEM 340 TO REFERENCE "ENGINEER" INSTEAD OF
"DISTRICT LABORATORY"

PLAN SHEETS-

SHEET6: REMOVED THE 'S' FROM DESCRIPTION OF HOT MIX

SHEETS 7, 7A-7I: REVISED AND SHIFTED GENERAL NOTES AS IDENTIFIED ABOVE

SHEETS 8, 8A: REVISED E&Q SHEETS TO REFLECT QUANTITY CHANGED IDENTIFIED
ABOVE

SHEETS 9, 10, 14: REVISED QUANTITIES AND BID CODES ON THESE SUMMARY SHEETS
TO MATCH THE QUANTITY CHANGES LISTED ABOVE.

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	100	2002	002	PREPARING ROW DOLLARS and CENTS	STA	141.250	1
	105	2074		REMOVING STAB BASE AND ASPH PAV (4") DOLLARS and CENTS	SY	4,142.000	2
	110	2001		EXCAVATION (ROADWAY) DOLLARS and CENTS	CY	27,251.000	3
	132	2005		EMBANKMENT (FINAL)(ORD COMP)(TY C) DOLLARS and CENTS	CY	29,074.000	4
	160	2003		FURNISHING AND PLACING TOPSOIL (4") DOLLARS and CENTS	SY	7,100.510	5
	164	2035	002	DRILL SEEDING (PERM) (RURAL) (CLAY) DOLLARS and CENTS	SY	49,703.560	6
	164	2041	002	DRILL SEEDING (TEMP) (WARM) DOLLARS and CENTS	SY	24,851.780	7
	164	2043	002	DRILL SEEDING (TEMP) (COOL) DOLLARS and CENTS	SY	24,851.780	8
	168	2001		VEGETATIVE WATERING DOLLARS and CENTS	MG	1,491.110	9
	169	2004	002	SOIL RETENTION BLANKETS (CL 1) (TY D) DOLLARS and CENTS	SY	2,000.000	10
	247	2366	033	FL BS (CMP IN PLC)(TY A GR 5)(FNAL POS) DOLLARS and CENTS	CY	19,963.000	11

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	310	2005		PRIME COAT (MC-30 OR AE-P) DOLLARS and CENTS	GAL	12,158.000	12
	316	2006		ASPH (AC-20-5TR) DOLLARS and CENTS	GAL	52,626.000	13
	316	2239		AGGR(TY-PD GR-4 SAC-B) DOLLARS and CENTS	CY	1,152.000	14
	340	2048	003	D-GR HMA(METH) TY-C SAC-B PG70-22 DOLLARS and CENTS	TON	14,541.000	15
	340	2050	003	D-GR HMA(METH) TY-C PG70-22 DOLLARS and CENTS	TON	26,072.000	16
	354	2041		PLANE ASPH CONC PAV (1.5") DOLLARS and CENTS	SY	3,358.000	17
	403	2001		TEMPORARY SPL SHORING DOLLARS and CENTS	SF	330.000	18
	416	2002	001	DRILL SHAFT (24 IN) DOLLARS and CENTS	LF	1,062.000	19
	420	2003	002	CL C CONC (ABUT) DOLLARS and CENTS	CY	107.600	20
	420	2004	002	CL C CONC (BENT) DOLLARS and CENTS	CY	65.100	21
	420	2029	002	CL S CONC (SLAB) DOLLARS and CENTS	CY	248.200	22

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	420	2033	002	CL S CONC (APPR SLAB) DOLLARS and CENTS	CY	395.900	23
	425	2015	001	PRESTR CONC SLAB BEAM (5SB12) DOLLARS and CENTS	LF	2,483.560	24
	428	2001	001	CONC SURF TREAT (CLASS I) DOLLARS and CENTS	SY	2,470.000	25
	432	2002		RIPRAP (CONC)(5 IN) DOLLARS and CENTS	CY	234.000	26
	450	2003		RAIL (TY T203) DOLLARS and CENTS	LF	328.000	27
	460	2122		CMP (GAL STL 21 IN) DOLLARS and CENTS	LF	456.000	28
	462	2004		CONC BOX CULV (4 FT X 3 FT) DOLLARS and CENTS	LF	82.000	29
	462	2017		CONC BOX CULV (7 FT X 6 FT) DOLLARS and CENTS	LF	46.000	30
	464	2005		RC PIPE (CL III)(24 IN) DOLLARS and CENTS	LF	146.000	31
	464	2007		RC PIPE (CL III)(30 IN) DOLLARS and CENTS	LF	70.000	32
	466	2050		WINGWALL (PW)(HW=6 FT) DOLLARS and CENTS	EA	1.000	33

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	ITEM NO	DESC CODE	S.P. NO.				
	466	2051		WINGWALL (PW)(HW=7 FT) DOLLARS and CENTS	EA	1.000	34
	466	2140		HEADWALL (CH-PW-S)(DIA= 24 IN) DOLLARS and CENTS	EA	1.000	35
	467	2225		SET (TY II)(30 IN)(RCP)(4:1)(C) DOLLARS and CENTS	EA	4.000	36
	467	2236		SET (TY II)(24 IN)(RCP)(6:1)(C) DOLLARS and CENTS	EA	2.000	37
	467	2302		SET (TY II)(21 IN)(CMP)(6:1)(P) DOLLARS and CENTS	EA	12.000	38
	496	2004		REMOV STR (SET) DOLLARS and CENTS	EA	8.000	39
	496	2005		REMOV STR (WINGWALL) DOLLARS and CENTS	EA	2.000	40
	496	2006		REMOV STR (HEADWALL) DOLLARS and CENTS	EA	4.000	41
	496	2007		REMOV STR (PIPE) DOLLARS and CENTS	LF	196.000	42
	496	2009		REMOV STR (BRIDGE 0-99 FT LENGTH) DOLLARS and CENTS	EA	2.000	43
	500	2001	005	MOBILIZATION DOLLARS and CENTS	LS	1.000	44

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	ITEM NO	DESC CODE	S.P. NO.				
	502	2001	033	BARRICADES, SIGNS AND TRAFFIC HAN- DLING DOLLARS and CENTS	MO	12.000	45
	506	2001	010	ROCK FILTER DAMS (INSTALL) (TY 1) DOLLARS and CENTS	LF	275.000	46
	506	2009	010	ROCK FILTER DAMS (REMOVE) DOLLARS and CENTS	LF	275.000	47
	506	2016	010	CONSTRUCTION EXITS (INSTALL) (TY 1) DOLLARS and CENTS	SY	160.000	48
	506	2019	010	CONSTRUCTION EXITS (REMOVE) DOLLARS and CENTS	SY	160.000	49
	506	2024	010	BACKHOE WORK (EROSION & SEDM CONT) DOLLARS and CENTS	HR	40.000	50
	506	2034	010	TEMPORARY SEDIMENT CONTROL FENCE DOLLARS and CENTS	LF	10,305.000	51
	512	2011	002	PORT CTB (DES SOURCE)(SAFETY SH)(TY 2) DOLLARS and CENTS	LF	210.000	52
	512	2029	002	PORT CTB (STKPL)(SAFETY SH)(TY 2) DOLLARS and CENTS	LF	210.000	53
	530	2011		DRIVEWAYS (ACP) DOLLARS and CENTS	SY	2,125.000	54

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	ITEM NO	DESC CODE	S.P. NO.				
	540	2001		MTL W-BEAM GD FEN (TIM POST) DOLLARS and CENTS	LF	261.000	55
	540	2005		TERMINAL ANCHOR SECTION DOLLARS and CENTS	EA	1.000	56
	540	2011		MTL BEAM GD FEN TRANS (THRIE-BEAM) DOLLARS and CENTS	EA	5.000	57
	542	2001		REMOVING METAL BEAM GUARD FENCE DOLLARS and CENTS	LF	590.000	58
	542	2002		REMOVING TERMINAL ANCHOR SECTION DOLLARS and CENTS	EA	4.000	59
	544	2001		GUARDRAIL END TREATMENT (INSTALL) DOLLARS and CENTS	EA	3.000	60
	545	2001		CRASH CUSH ATTEN (INSTL) DOLLARS and CENTS	EA	2.000	61
	545	2003		CRASH CUSH ATTEN (REMOVE) DOLLARS and CENTS	EA	2.000	62
	550	2006		GATE (REMOVE) DOLLARS and CENTS	EA	1.000	63
	552	2001		WIRE FENCE (TY A) DOLLARS and CENTS	LF	115.000	64
	552	2005		GATE (TY 1) DOLLARS and CENTS	EA	1.000	65

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	ITEM NO	DESC CODE	S.P. NO.				
	556	2007		PIPE UNDERDRAINS (TY 7) (6") DOLLARS and CENTS	LF	100.000	66
	560	2004	001	MAILBOX INSTALL-S (WC-POST) TY 3 FND DOLLARS and CENTS	EA	4.000	67
	560	2005	001	MAILBOX INSTALL-D (WC-POST) TY 3 FND DOLLARS and CENTS	EA	2.000	68
	644	2022		INS SM RD SN SUP&AM TY S80(1) SA(P) DOLLARS and CENTS	EA	26.000	69
	644	2060		REMOVE SM RD SN SUP & AM DOLLARS and CENTS	EA	22.000	70
	658	2258		INSTL DEL ASSM (D-SW)SZ (TYC)CTB DOLLARS and CENTS	EA	4.000	71
	658	2260		INSTL DEL ASSM (D-SW)SZ (TYC)GF1 DOLLARS and CENTS	EA	6.000	72
	658	2316		INSTL OM ASSM (OM-2Z)(FLX)GND DOLLARS and CENTS	EA	9.000	73
	662	2001		WK ZN PAV MRK NON-REMOV (W) 4" (BRK) DOLLARS and CENTS	LF	9,391.000	74
	662	2004		WK ZN PAV MRK NON-REMOV (W) 4" (SLD) DOLLARS and CENTS	LF	37,568.000	75
	662	2032		WK ZN PAV MRK NON-REMOV (Y) 4" (SLD) DOLLARS and CENTS	LF	37,880.000	76

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	ITEM NO	DESC CODE	S.P. NO.				
	662	2052		WK ZN PAV MRK REMOV (REFL) TY I-C DOLLARS and CENTS	EA	40.000	77
	662	2054		WK ZN PAV MRK REMOV (REFL) TY II-A-A DOLLARS and CENTS	EA	26.000	78
	662	2060		WK ZN PAV MRK REMOV (TRAF BTN) TY W DOLLARS and CENTS	EA	124.000	79
	662	2062		WK ZN PAV MRK REMOV (TRAF BTN) TY Y DOLLARS and CENTS	EA	76.000	80
	666	2003		REFL PAV MRK TY I (W) 4" (BRK)(100MIL) DOLLARS and CENTS	LF	7,125.000	81
	666	2012		REFL PAV MRK TY I (W) 4" (SLD)(100MIL) DOLLARS and CENTS	LF	28,505.000	82
	666	2036		REFL PAV MRK TY I (W) 8" (SLD)(100MIL) DOLLARS and CENTS	LF	5,675.000	83
	666	2069		REFL PAV MRK TY I(W)(DBL ARROW)(100MIL) DOLLARS and CENTS	EA	10.000	84
	666	2105		REFL PAV MRK TY I (Y) 4" (BRK)(100MIL) DOLLARS and CENTS	LF	7,125.000	85
	666	2111		REFL PAV MRK TY I (Y) 4" (SLD)(100MIL) DOLLARS and CENTS	LF	28,498.000	86

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	ITEM NO	DESC CODE	S.P. NO.				
	672	2012	034	REFL PAV MRKR TY I-C DOLLARS and CENTS	EA	358.000	87
	672	2015	034	REFL PAV MRKR TY II-A-A DOLLARS and CENTS	EA	713.000	88
	677	2001		ELIM EXT PAV MRK & MRKS (4") DOLLARS and CENTS	LF	62,114.000	89

GENERAL NOTES:**Basis of Estimate**

160	Topsoil	1 CY/7 SY	7101 SY	1014 CY
164	Seed for Erosion Cont	4840 SY/AC	49704 SY	10.3 AC
166	Fertilizer (13-13-13)	1/8 LB/SY	49704 SY	3.1 TON
168	Vegetative Watering (Item 164)(Temp)(Warm)	10 GAL/SY	24852 SY	248.5 MG
	(Item 164)(Temp)(Cool)	10 GAL/SY	24852 SY	248.5 MG
	(Item 164)(Perm)	20 GAL/SY	49704 SY	994 MG
247	FL BS (CMP IN PLC)(TY A GR 5)(FINAL POS)	27 CF/CY	281907 CF	19,963 CY
310	Prime Coat (MC-30 or AE-P)	0.20 GAL/SY	60790 SY	12158 GAL
316	Surface Treatments Seal Coat			
	Asph (AC 20-5TR)	<u>Total</u> 0.40 GAL/SY	1187 SY	475 GAL
	Aggr (TY PD GR 4 SAC-B)	1 CY/120 SY	1187 SY	10 CY
	One Course Surface Treatment	<u>Total</u>	130364 SY	
	Asph (AC 20-5TR)	0.40 GAL/SY	130364 SY	52151 GAL
	Aggr (TY PD GR 4 SAC-B)	1CY/115 SY	130364 SY	1142 CY
340	Dense-Graded Hot-Mix Asphalt (Method)			
	TY C PG 70-22 (Intermediate Course)	3960 LB/CY	13168 CY	26072 TON
340	Dense-Graded Hot-Mix Asphalt (Method)			
	TY C SAC-B PG 70-22 (Surface Course)	3960 LB/CY	7344 CY	14541 TON

** For Informational Purposes Only

GENERAL

References to manufacturer's trade name or catalog numbers are for the purpose of identification only. Similar materials from other manufacturers are permitted if they are of equal quality, comply with the specifications for this project, and are approved, except for Roadway Illumination, Electrical, and Traffic Signal Items.

Accrue contract time charges through the Contractor's completion of the final punchlist.

Meet weekly with the Engineer to notify him/her of planned work for the upcoming week. Provide a three-week "look ahead," as well as all work performed over the past week.

Blade the side slopes to remove all grass from the area of construction before placing flexible base on that portion of the roadway to be widened, leveled-up, seal coated/surfaced treated, or Hot Mix Asphaltic Concrete Pavement (HMACP) overlaid. Blade the sod back onto the side

slopes after the proposed items of work have been completed. Consider subsidiary to pertinent Items.

Equip all construction equipment used in roadway work with a permanently mounted 360° revolving or strobe warning light with amber lens. Light will have a minimum lens height and diameter of 5 inches and mounting height of not less than 6 feet above the roadway surface and be visible from all sides. Attach at each side of the rear end of the construction equipment an approved orange warning flag mounted not less than 6 feet above the roadway surface.

Overhead and underground utilities exist in the vicinity of the project. The exact location of underground utilities is not known. Contact the Texas Excavation Safety Systems (TESS) or DIG TESS at 1-800-344-8377 and any other area utility companies, which may not be a part of DIGG-TESS, for exact locations at least 48 hours before commencing any work that might affect present utilities.

If working near power lines, comply with the appropriate sections of Local Legal Requirements, Texas State Law, and Federal Regulations relating to the type of work involved.

Provide a smooth, clean sawcut along the existing asphalt pavement structure, as directed. Consider subsidiary to the pertinent Items.

Sweep, mow, and remove all litter on the right of way, within the project limits, to keep the jobsite in a neat and presentable condition at all times. Perform this work as directed.

Remove all construction debris and surplus material generated by the construction work within the project limits. Perform this work as directed. Consider subsidiary to the pertinent Items.

Trim vegetation around signs and other obstructions. Consider subsidiary to pertinent Items.

Supply litter barrels in enough numbers at locations as directed to control litter within the project. Consider subsidiary to pertinent Items.

Sweep the roadway and keep it free of sediment as directed.

Protect all areas of the right of way, which are not included in the actual limits of the proposed construction areas from destruction. Exercise care to prevent damage to trees, vegetation, and other natural surroundings. Areas not to be disturbed will be as directed. Restore any area disturbed because of the Contractor's operations to a condition as good as, or better than, before the beginning of work.

Damage to existing pipes and SET's due to Contractor operations shall be repaired at Contractor's expense.

All locations used for storing construction equipment, materials, and stockpiles of any type, within the right of way, will be as directed. Use of right of way for these purposes will be

restricted to those locations where driver sight distance to businesses and side street intersections is not obstructed and at other locations where an unsightly appearance will not exist.

The Project Superintendent will be capable of speaking English and will be available to contact at all times when work is being performed including subcontractor work. The Superintendent will be available and on-call 24 hours a day.

Furnish, to the Engineer, a list of the final centerline elevations.

During evacuation periods for Hurricane events, as predicted by National Oceanic and Atmospheric Administration (NOAA), the Contractor will cooperate with Department requirements for the restricting of Lane Closures and arranging for Traffic Control to facilitate Coastal Evacuation Efforts. In addition, the Contractor's assistance may be requested outside of the Project Limits.

Storm Water Pollution Prevention Plan

Maintain erosion control features according to the TxDOT SW3P sheet.

Restrict construction vehicles from traversing or utilizing existing roadways, unprotected construction areas, and areas with vegetative cover.

Maintain vehicles at designated maintenance sites, unless otherwise approved.

Transport any soils contaminated during construction off of the proposed project, away from the site, and properly dispose of off-site.

Collect wastewater generated on-site by chemical toilets, transport and dispose of off-site, in a proper manner.

For all work over or near Bodies of Water (Lakes, Rivers, Ponds, Creeks, etc.):

Keep on hand Synthetic Absorbent Booms (Petroleum Sorbent Booms, Petroleum Socks, Absorbant Socks, etc.) and Absorbent Pads (Eversoak Sorbents, Industrial Absorbent Pads, Calicorp Absorbent Pads, etc.), both types, for spilled petroleum products, in enough quantity to mitigate a petroleum-type spill due to Contract work.

ITEM 5 – CONTROL OF THE WORK

Before Contract letting, bidders may obtain from the Engineer's office, the earthwork information. If copies of the actual cross-sections (paper copies) are requested, they will be available at the Engineer's office for borrowing by copying companies for the purpose of making copies for the bidder, at the bidder's expense. In addition, cross-sections will be available in electronic format, upon request, at no cost to the bidder.

GEOPAK earthwork output listings for this project are available upon request on diskettes at the Area Engineer's office.

Mark and maintain 100-foot station intervals for the duration of the project. Consider subsidiary to pertinent Items.

Electronic Shop Drawing Submittals:

Submit Electronic Shop Drawing Submittals according to the current **Guide to Electronic Shop Drawing Submittal (GESDS)**. For instructions on submitting shop drawings electronically go to TxDOT website > Business with TxDOT > Bridge Information > Shop Drawings. File is titled: **Guide to Electronic Shop Drawing Submittal**.

Copies of the standard shop drawings are on file with Traffic Operations Division, Bridge Division, and the Materials Section of Construction Division. Additional shop drawings for roadway illumination assemblies built in conformance with these drawings are not required. Pre-approved shop drawing manufacturers and assembly model numbers can be found at TxDOT website > Business with TxDOT > Materials Information > Material Producer List. Category is Roadway Illumination and Electrical Supplies

Submit all Shop Drawings and Working Drawings, which do not require direct submittal to the **Bridge Division Fabrication Section**, electronically, to the following address:

Brian.boecker@kimley-horn.com

In every e-mail submittal, the "CC:" or "Copy To:" line of the header will include the following e-mail addresses:

Contractor (*Include Contractor's e-mail address at/or prior to the Preconstruction Conference.*)

MRAMTHU@dot.state.tx.us

ITEM 6 - CONTROL OF MATERIALS

Article 6.5

Give a minimum of 24 hours notice for materials, which require inspection at the plant.

ITEM 7 – LEGAL RELATIONS AND RESPONSIBILITIES

Article 7.19

Do not initiate activities in a Project Specific Location (PSL) associated with a U.S. Army Corps of Engineers (USACE) jurisdictional area that have not been previously evaluated by the USACE as part of the permit review of this project. Such activities include, but are not limited to, haul roads, equipment staging areas, borrow and disposal sites. Associated defined here means materials are delivered to or from the PSL. The jurisdictional area includes all waters of the U.S. including wetlands or associated wetlands affected by activities associated with this project. Special restrictions may be required for such work. Consult with the USACE regarding activities, including Project Specific Locations (PSLs) that have not been previously evaluated

by the USACE. Provide the Department with a copy of all consultations or approvals from the USACE before initiating activities.

Proceed with activities in PSLs that do not affect a USACE jurisdictional area if a self-determination has been made that the PSL is non-jurisdictional or proper USACE clearances have been obtained in jurisdictional areas or have been previously evaluated by the USACE as part of the permit review of this project. Document any determinations that their activities do not affect a USACE jurisdictional area. Maintain copies of their determinations for review by the Department or any regulatory agency.

The Contractor must document and coordinate with the USACE, if required, before any excavation hauled from or embankment hauled into a USACE jurisdictional area by either (1) or (2) below.

(1) Restricted Use of Materials for the Previously Evaluated Permit Areas.

Document both the project specific location (PSL) and their authorization. Maintain copies for review by the Department or any regulatory agency. When an area within the project limits has been evaluated by the USACE as part of the permit process for this project:

- a. Suitable excavation of required material in the areas shown on the plans and cross sections as specified in Item 110, Excavation, is used for permanent or temporary fill (Item 132, Embankment) within a USACE jurisdictional area;
- b. Suitable embankment (Item 132) from within the USACE jurisdictional area is used as fill within a USACE evaluated area; and,
- c. Unsuitable excavation or excess excavation ["Waste"] (Item 110, Excavation) that is disposed of at an approved location within a USACE evaluated area.

(2) Contractor Materials from Areas Other than Previously Evaluated Areas.

Provide the Department with a copy of all USACE coordination or approvals before initiating any activities in a jurisdictional area within the project limits that has not been evaluated by the USACE or for any off right of way locations used for the following, but not limited to, haul roads, equipment staging areas, borrow and disposal sites:

- a. Item 132, Embankment, used for temporary or permanent fill within a USACE jurisdictional area; and,
- b. Unsuitable excavation or excess excavation ["Waste"] (Item 110, Excavation) that is disposed of outside a USACE evaluated area.

The total area estimated to be disturbed for this project is 38 acres. The disturbed area in this project, all project locations in the Contract, and the Contractor project specific locations (PSLs), within 1 mile of the project limits, for the Contract will further establish the authorization requirements for storm water discharges. The Department will obtain an authorization to discharge storm water from the Texas Commission on Environmental Quality (TCEQ) for the construction activities shown on the plans. The Contractor is to obtain required authorization from the TCEQ for Contractor PSLs for construction support activities on or off the ROW.

When the total area disturbed in the Contract and PSLs within 1 mile of the project limits exceeds 5 acres, provide a copy of the Contractor NOI for PSLs on the ROW to the Engineer and to the local government that operates a separate storm sewer system.

This project required formal consultation, permits, or both with environmental resource agencies. Environmentally sensitive areas will most likely be encountered on Contractor designated PSLs for this project.

TxDOT has assumed a U.S. Army Corps of Engineers' (USACE) Nationwide Permit #14 (NWP #14) for this project. This allows a maximum of $\frac{1}{10}$ of an acre of permanent fill to be placed within the creek channel. If more than $\frac{1}{10}$ of an acre will need to be filled, a pre-construction notice will need to be completed and mailed to the USACE or an additional permit will need to be obtained, by the Contractor, prior to construction. If temporary access roads will be needed, adhered to the requirement of NWP #14 and restore all disturbed areas to their original contours, once construction is complete.

A project that requires a USACE permit must use at least one of the Best Management Practices (BMP) from each category listed on the Texas Commission on Environmental Quality (TCEQ) Section 401 checklist for NWP's. The erosion control BMP for this project would be blankets/matting. The post construction total suspended solid control BMP for this project would be vegetative filter strips. The sedimentation control BMP for this project would be silt fences and rock berms.

Do not park equipment or make stockpiles where driver sight distance to businesses and side street intersections is obstructed, especially after work hours. If it is necessary to park where drivers' views are blocked, make every effort to flag traffic accordingly. Give the travelling public first priority.

Maintain positive drainage for permanent, as well as, temporary drainage for the duration of the project. This work is the sole responsibility of the Contractor. Construct temporary and permanent drainage systems prior to the placement of temporary pavement, when possible, but absolutely prior to the placement of permanent pavement. Be responsible for any items associated with the temporary/interim drainage and all related maintenance. No direct payment will be made for this work. The Engineer will have the final authority in determining the adequacy of any temporary/permanent drainage features installed.

ITEM 8 – PROSECUTION AND PROGRESS

Article 8.3

Working days will be computed and charged in accordance with Article 8.3.A.1 Five-Day Work Week.

Incentives for this project will be computed in accordance to Article 8.11.A.1, Early Contract Completion Incentive.

ITEM 100 – PREPARING RIGHT OF WAY

Do not burn brush, unless otherwise approved.

Use hand methods or other means to remove obstructions, if doing work by mechanical methods is impractical. Consider subsidiary to the pertinent Items.

Work is allowed to be performed during the nighttime, with prior approval.

ITEM 9 – MEASUREMENT AND PAYMENT

Provide full-time, off-duty, uniformed, certified peace officers in officially marked vehicles, as part of traffic control operations, as directed.

Show proof of certification by the Texas Commission on Law Enforcement Standards.

No payment will be made for peace officers unless the Contractor completes the proper Department form. Request the form from the Department.

No payment for officers used for moving equipment without prior written approval.

ITEM 100, 132 & 160 - PREP ROW, EMBANKMENT, & TOPSOIL

Use hand methods or other means to remove objectionable material, if doing work by mechanical methods is impractical. Consider subsidiary to the pertinent Items.

ITEM 100 – PREPARING RIGHT OF WAY

Do not burn brush, unless otherwise approved.

Use hand methods or other means to remove obstructions, if doing work by mechanical methods is impractical. Consider subsidiary to the pertinent Items.

ITEM 110 & 132 – EXCAVATION & EMBANKMENT

At no time will the retaining wall backfill material exceed the adjacent embankment operation by more than one embankment lift. At no time will the embankment adjacent to the retaining wall backfill exceed the wall backfill by any elevation.

Unsuitable material encountered in a cut or fill section will be considered waste. The Engineer will define unsuitable material. Material, which the Contractor might deem to be unsatisfactory or unsuitable, due to moisture content, will not be considered unsuitable material, unless otherwise approved.

ITEM 132 & 400 - EMBANKMENT & EXCAVATION AND BACKFILL FOR STRUCTURES

Use approved compaction equipment for all backfilling and embankment operations. Detachable sheepsfoot-type wheels mounted on backhoes, trackhoes and other similar equipment will not be allowed for compaction operations, including pipe installation.

ITEM 132 - EMBANKMENT

For Ty "C" Embankment, a maximum PI of 20 will be allowed.

Engineer must approve the embankment material before use on the project.

Work to correct unstable material (e.g. dry, wet, loose, etc.) to a depth of 6" below existing subgrade elevation, prior to beginning any embankment placement. Consider subsidiary to the various bid Items. Any work to correct unstable material below the 6" depth, below existing subgrade elevation, will be paid as extra work. However, there will be no payment to correct failures, in the subgrade areas, that were constructed under this contract.

Track ALL embankment slopes left idle for more than 14 days, within or at the end of the 14-day idle period, to prevent erosion. Tracking consists of operating a tracked vehicle or equipment up and down the slope, leaving track marks perpendicular to the direction of the slope. Tracking slopes to prevent erosion is considered subsidiary to the pertinent items.

Correct subgrade (e.g. unstable areas, soft spots, etc.) prior to the dumping of Flexbase or HMA CP. Consider subsidiary to the pertinent Items.

Scarify and re-compact existing asphaltic/base sections, which are not called out to be removed in fill sections, where the bottom of the proposed pavement structure is higher than and over the top of the existing asphalt surface in order to reduce the possibility of a slip plane.

ITEM 160 - TOPSOIL

Obtain approval of all topsoil sources before digging begins. Ensure off-site topsoil has a minimum PI of 25, or as directed. Ensure that the topsoil placed is similar to the topsoil that is within the project. To the extent possible, obtain as much of the topsoil from within the project site, or as directed. TxDOT reserves the right to take samples, as needed, to assure that the material meets the PI and other requirements as indicated in the Specifications (Fertility, Organics, Erodability, etc.).

No Sandy Loam allowed, unless the project dictates otherwise.

Obtain approval of the actual depth of the topsoil sources for both on-site and off-site sources. Construct topsoil stockpiles no more than five (5) feet in height.

It is permissible to use topsoil dikes for erosion control berms within the right of way.

Track ALL embankment slopes left idle for more than 14 days, within or at the end of the 14-day idle period, to prevent erosion. Tracking consists of operating a tracked vehicle or equipment up and down the slope, leaving track marks perpendicular to the direction of the slope. Consider the tracking slopes to prevent erosion subsidiary to the pertinent items.

Upon final grading, immediately track all topsoiled slopes to prevent erosion, as directed. Consider subsidiary to the pertinent Items.

Provide measurements for payment of topsoil quantities before seeding. Consider subsidiary to the pertinent Items.

ITEM 164 – SEEDING FOR EROSION CONTROL

Obtain vegetation establishment of all seeded areas, including adequate coverage, prior to “Final Acceptance.” If all other work is complete, time charges may be suspended, until adequate coverage is established.

Do not use ryegrass for temporary cover.

Reseed all areas with “little or no” grass growth after 1 month from the last seeding date, as directed by the Engineer. Consider subsidiary to the various bid items.

ITEM 166 – FERTILIZER

Use 13-13-13 fertilizer analysis, unless otherwise directed. Take soil samples, as directed, to determine the actual soil needs for fertilizer. Consider this work subsidiary to pertinent Items.

ITEM 168 – VEGETATIVE WATERING

Water all areas of project to be seeded or sodded.

Maintain the seedbed in a condition favorable for the growth of grass. Watering can be postponed immediately after a rainfall on the site of ½ inch or greater, but will be resumed before the soil dries out. Continue watering until final acceptance.

Vegetative watering rates and quantities are based on ¼ inch of watering per week over a 3-month watering cycle. The actual rates used and paid for will be as directed and will be based on prevailing weather conditions to maintain the seedbed.

Obtain water at a source that is metered or furnish the manufacturer’s specifications showing the tank capacity for each truck used. Notify the Engineer, each day that watering takes place, before watering, so that meter readings or truck counts can be verified.

ITEM 169 – SOIL RETENTION BLANKETS

Provide machined mat of curled wood excelsior of 80%, six-inch or longer fibers. The top of each blanket is covered with a photodegradable extruded plastic mesh. Typical weight = 0.975 lbs/sq yd; typical roll width = 48 or 96 inches; typical roll length = 90 feet. This soil retention blanket should meet the previous stated requirements, equal, or better as approved.

Use materials from prequalified material producers list as shown on the Texas Department of Transportation (TxDOT) ----- Construction Divisions (CST) materials producers list. See TxDOT website > Business with TxDOT > Materials Information > Material Producer List for list of pre-qualified manufacturers. Direct all questions to the Maintenance Division, Vegetation Management Section, 125 E. 11th Street, Austin, TX 78701-2483.

ITEM 247 - FLEXIBLE BASE

The following table will govern the acceptance of compaction on base courses, when compacted in multiple courses. Compaction requirements are in percent of maximum dry density as determined by (Tex-113-E). When compacting in a single course, compact to at least 100% of maximum dry density as determined by Tex-113-E.

Item	Material	All Roadways	
		Lift	Min Density
247	FL BS (CMP IN PLC)	1	98%
		2 (final lift)	100%

Use Type "A" material. Minimum PI required is zero (0), maximum PI required is ten (10).

Correct subgrade (e.g. unstable areas, soft spots, etc.) prior to the dumping of Flex Base. Consider subsidiary to the pertinent Items.

Use Flex Base (CMP IN PL) (TY A GR 5) for driveways, minor streets, and other locations as directed.

Roll shoulder base with a light pneumatic roller to prevent erosion.

Complete ditches and slopes in conformity with the required lines, grades, and cross-sections shown on the plans or as directed & cut ditches and place drainage structures prior to placing base.

ITEM 310, 340

Do not perform work on these Items, unless otherwise directed, when the weather, as indicated by National Oceanic and Atmospheric Administration (NOAA), states a chance of rain of 40% or greater.

ITEM 310 – PRIME COAT

Apply blotter material to all driveways and intersections.

Use bituminous material of the type MC-30 or AE-P.

ITEM 316 – SURFACE TREATMENTS

Apply AC-20-5TR when air temperature is above 70 degrees F and rising.

Do not apply asphalt within 1½ hours of sunset, or later, unless otherwise directed.

Ensure the accuracy of the Distance Measuring Instrument (DMI) with the Engineer, prior to marking the Asphalt and Rock Land shots.

Ensure Seal Coat Operation is at most one day's production rate ahead of the ACP laying operation.

Ensure the minimum aggregate surface classification is class B.

Surface all transitions, tapers, climbing lanes and intersections to the limits as directed.

Keep all traffic, including construction traffic, off freshly placed surface treatment, as directed.

Distribution to each control section will be proportioned to the volumetric quantity as shown on the "daily road report."

Use ionically compatible asphalt to precoat aggregate, which is compatible with the asphalt specified for each specific Surface Treatment.

ITEM 340 - DENSE-GRADED HOT-MIX ASPHALT (METHOD)

The Contractor must sample asphalt binder, in accordance to the applicable item. Label the sample can with the corresponding CSJ, lot, and subplot numbers.

Samples must be stored in a common area where they are readily available to the TxDOT representative at the plant. The Contractor will be responsible for supplying storage for all samples. Retain all asphalt samples until directed otherwise.

When directed, the Contractor is responsible for disposal of all asphalt binder samples, in accordance to Local, State, and Federal regulations.

Transition from the new ACP to the existing surface tie-in by utilizing a required milled transition to a vertical butt joint. Make the transition a minimum of 50 feet H: 1 inch V slope ratio of newly placed ACP. Make the temporary joint, at the tie-in, a minimum of a "3-paper-taper" longitudinally and covering the entire width. Sawcut existing pavement as directed. Prior

to milling, core the existing pavement to determine its thickness. Do not proceed with milling until directed. Consider this work subsidiary to the pertinent Items.

WMA is allowed for use at the Contractor's option.

If WMA is used, Job Mix Formula (JMF) 1 may be designed and submitted to the Engineer without including the WMA additive. Document the additive or process used and recommend rate on the JMF1 submittal. Use an approved laboratory to perform the Hamburg Wheel test and provide results with the mixture design or provide the laboratory mixture and request that the Department perform the Hamburg Wheel test. The Construction Division maintains a list of approved laboratories. The Engineer will be allowed 10 working days to provide the Contractor with Hamburg Wheel test results on the laboratory mixture design.

Upon receiving conditional approval of JMF1 from the Engineer, provide a plant-produced trial batch including the WMA additive or process, if applicable for verification testing of JMF1 and development of JMF2. The Engineer and the Contractor will verify JMF1 based on plant-produced mixture from the trial batch, unless otherwise approved.

If WMA is used, produce an asphalt mixture within the temperature range of 215°F and 350°F, unless directed otherwise.

When warm mix asphalt is used, furnish Warm Mix Asphalt (WMA) additives or processes listed on the Department's approved list maintained by the Construction Division, unless otherwise approved. Apply warm mix asphalt additive or processes in accordance with the manufacturer's recommendation, unless directed otherwise.

Provide mixture type C using PG binder 70-22S.

Use aggregate that meets the SAC requirement of class B.

High-Temperature Binder Grade	Test Method	Hamburg Wheel Test Requirements ¹
		Minimum # of Passes @ 0.5" Rut Depth, Tested @122°F
PG 64 or lower	Tex-242-F	7,000
PG 70	Tex-242-F	15,000
PG 76 or higher	Tex-242-F	20,000

1. The Engineer may accept Hamburg Wheel test results for production and placement if no more than 1 of the 5 most recent tests is below the specified number of passes and the failing test is no more than 2,000 passes below the specified number of passes.

Target laboratory molded density is 96.5% for all mixture types.

Complete all roadways before final surface course placement, unless otherwise directed.

Ensure placement sequence to avoid excess distance of longitudinal joint lapback not to exceed one day's production rates.

Use a device to create a maximum 3H: 1V notched wedge joint on all hot mix joints of 2 inches or greater. Consider subsidiary to the pertinent Items.

Submit any proposed adjustments or changes to a job mix formula to the Engineer before production of the new job mix formula.

Do not dilute tack coat. Apply it through a distributor spray bar in accordance with Article 316.3(A) Distributor.

When surface irregularities, as defined in Article 340.4.I, "Irregularities," are detected or measured, the Contractor must take immediate corrective action defined as the removal and replacement of a full lane width of the defective area using a paver to place new mix, unless otherwise directed.

At the contractor's option, Type B PG70-22 hot mix may be used for level-up within 2 inches below final 2-inch riding surface. If Type B hot mix is used, the top 2 inches of level-up will be Type C PG70-22.

Reclaimed Asphalt Pavement (RAP) aggregate must meet the requirements stated in Article 340.2.A.2 & 340.2.A Table 1.

Use of RAP is only allowed in Type A and Type B mixtures, unless otherwise approved. RAP is not allowed in the Final Surface Course, unless approved otherwise.

RAP will be Contractor furnished.

ITEM 416 – DRILL SHAFT

Take one core hole at each abutment and bent.

Remove spoils, daily, out of flood plain or as directed.

ITEM 420 - CONCRETE STRUCTURES

Do not perform any concrete surface placement work, unless otherwise directed, when the weather, as indicated by National Oceanic and Atmospheric Administration (NOAA), states a chance of rain of 40% or greater.

Sulfate resistant concrete is not required for any class of concrete.

Remove all loose Formwork and other Materials from the Floodplain, daily, which could float off in a Stormwater Event, as directed.

Prior to the completion of work, stencil the National Bridge Inventory (NBI) number (structure number) on each structure built/shown on this project, as directed. Verify with the Engineer that the NBI number, which is shown on each Bridge Layout, is the number to use. Stencil the NBI number in an approved location on each bridge. Consider subsidiary to the pertinent Items.

ITEM 425 PRECAST CONCRETE STRUCTURAL MEMBERS

Hold a Prephase meeting for the erection of concrete & steel members such as, Precast-Prestressed Concrete Beams and Precast-Prestressed Concrete Panels, etc., prior to the work, as directed.

ITEM 428 - CONCRETE SURFACE TREATMENT

Provide a Class I Surface Treatment to the following elements:

1. Upper surfaces of the bridge deck slab and approach slab

ITEM 432 - RIPRAP

Remove all loose formwork and other materials from the floodplain, daily, which would float off in a stormwater event, as directed.

Make 5-inches thick unless otherwise noted or directed.

Where any proposed riprap joins existing riprap, saw cut the existing riprap and dowel/epoxy the joint as directed. Consider subsidiary to the pertinent Items.

Additional riprap may be required, as determined by the Engineer, near the end of project completion, due to unanticipated erosion locations. Any additional, approved riprap will be paid under this item.

ITEM 460 - CORRUGATED METAL PIPE

Cut pipe ends, in the field, to match roadway side slopes, or as directed. Apply asphalt base aluminum paint to the cut ends.

Verify all side-road pipe lengths in the field to conform to a side slope ratio of 6H: 1V from the pipe flowline to the base crown of the side road or street.

Cut ditches to grade before laying pipe.

ITEM 462 - CONCRETE BOX CULVERTS AND STORM DRAINS

Provide Shop Drawings, signed and sealed by a Licensed Professional Engineer, for all precast box culverts. Indicate the appropriate design load as shown on the plans (HS20 or HS25) and the maximum design depth of fill.

Use $\frac{3}{8}$ -inch to 1½-inch aggregate for bedding material.

ITEM 466 - HEADWALLS AND WINGWALLS

Removal of existing headwalls and wingwalls will be considered subsidiary to pertinent items.

ITEM 467 - SAFETY END TREATMENT

Cut pipe ends, in the field, to match roadway side slopes, or as directed. Apply asphalt base aluminum paint to the cut ends.

ITEM 496 - REMOVING STRUCTURES

The Contractor's attention is directed to the fact that migratory birds tend to concentrate nesting on transportation structures. If migratory bird nests are present within the project limits, remove all old migratory bird nests only between September 1 and January 31 from any structure where work will be done. In addition, be prepared to prevent migratory birds from building nests between February 1 and August 31.

All methods used for the removal of old bird nests and the prevention of re-nesting must be approved by the Austin District Biologist, well in advance of the planned use.

In the event that any active nest of migratory birds is encountered on-site during project construction, all construction activity within 150 feet of the nest will cease immediately. Contact the District Biologist to determine how to proceed.

Notify TxDOT at least 30 days prior to any Bridge or Bridge-Class Culvert Removal that will require a 10-Calendar-Day, Prior-To-Work Notification to Texas Department of State Health Services (DSHS). If the work does not happen on the notified date then another 10-Calendar-Day, Prior-To-Work Notification will be required.

Provide a detailed plan for the removal of the existing structure to include the schedule of removal and list of all equipment to be used.

The Demolition Plan will meet the requirements of the Corps of Engineers' Section 404 Permit. No debris will be allowed to fall into the Delaware Creek or its floodway. Sawcut the old bridge columns to a minimum of 2 feet or more below the finished ground line, unless otherwise directed.

No work over, around, or in the Delaware Creek will be allowed to proceed until the Engineer has approved the Demolition Plan. There may be other requirements associated with this item, to be determined dependent on the Demolition Plan submitted.

Include a Traffic Control Plan (TCP) for any Structure(s) Removal, as directed.

The structure or structures to be removed may have surface coatings, which may contain hazardous materials. Provide for the safety and health of employees and abide by all OSHA Standards and Regulations as well as those set by Texas Department of State Health Services (DSHS).

ITEM 502 - BARRICADES, SIGNS, AND TRAFFIC HANDLING

The Area Engineer (AE) and the District's Director of Construction (DDC) will approve additional lane closures, prior to any work.

Maintain a written record of documentation of "The Additional Approved Lane Closures."

One lane will remain open, in each direction, at all times, unless otherwise shown on the plans or as approved by the AE and DDC.

Meet with the Engineer prior to roadway and lane closures to ensure that sufficient equipment, materials, devices, and workers will be used. Discuss contingency plans at that time. Consider inclement weather prior to implementing the lane closures.

Cancel Off-Duty Peace Officers and their Motor Vehicle Units when the Scheduled lane closures are canceled. Failure to cancel the Off Duty Officers and their respective Motor Vehicle Units will not be cause for payment, by TxDOT, for "Show Up" time.

Do not set up any lane closures when the weather, as indicated by National Oceanic and Atmospheric Administration (NOAA), shows a chance of rain of 40% or greater, unless otherwise directed.

Do not set up any Lane Closure / TCP when the pavement is wet prior to the "setup," unless otherwise directed. Revise Traffic Control, when inclement weather is imminent, as directed.

Incorporate and maintain a 3H: 1V safety wedge into the proposed construction for any roadway edge of 2 inches or greater adjacent to a roadway under traffic.

Within the limits of the project, provide standard barricades, warning signs, delineators, lights, 28-inch cones, and flaggers in enough numbers and combinations, as directed.

Use a minimum of 2 flaggers, 2 advance warning flashing arrow panels (TY C), 2 of each signs CW20-5R or CW20-5L with appropriate distance plaques and CW9-2R or CW9-2L and 28-in. cones at each location in which milling or paving operations are in progress. Maintain at least 1 lane of traffic in each direction during paving or milling operations. Maintain at least the minimum numbers of lanes as directed.

No weekend closures will be allowed on the weekends, which include the following holidays: January 1, the last Monday in May, July 4, the first Monday in September, the fourth Thursday in November, December 25, Easter weekend, and the first working day before or after any of the aforementioned holidays. Unless otherwise approved, no weekend closures will be allowed on the weekends of special events that could be impacted by the construction. Ensure all equipment, vehicles, workers, etc., associated with these closures are off the roadways and all lanes re-opened at least by noon of the Friday before these holidays and special events.

Place TY III Barricade 4 feet (min.), 8 feet (max.) or a minimum of 2 Barrels at each stockpile of material that is placed on the right of way and is located within 30 feet of the traveled way. See BC (10)-07 sheet for more details.

Use advance warning flashing arrow panels for the closing of traffic lanes. Furnish one stand-by unit, in good working condition at the jobsite, ready for immediate use.

Maintain access to all streets and driveways at all times, unless otherwise approved. Consider subsidiary to the pertinent Items.

Furnish advisory speed signs in enough numbers as directed.

For each Lane Closure Set-up, provide a “Buffer Space” and Shadow Vehicle with Truck Mounted Attenuator (TMA), as directed.

Provide a “Downstream” Buffer Space ($\approx 100'$ per lane with devices spaced at $\approx 20'$) for each lane closure setup, as directed.

Maintain enough workers to revise traffic control as directed.

Maintain construction-warning signs, which are needed for longer periods than what is shown on the traffic control plan or as directed. Consider subsidiary to the pertinent Items.

Cover or remove any existing sign(s), which conflict with temporary traffic control operations. Install all permanent signs, delineation, and object markers necessary for the operation of any roadway before opening that section of roadway to traffic, regardless of the phase during which the roadway construction occurs. Erect the signs on temporary mounts until the permanent mounts are installed. Consider any costs associated with the temporary mounts subsidiary. Repair or replace any signs, which are damaged by the Contractor's operations during construction or which are deemed not sufficient. The Engineer will be the sole judge of the adequacy of the sign(s). Consider this work subsidiary to the pertinent Items.

Secure a 28-inch cone on top of any foundations that have protruding studs during construction. The cones will meet the specifications listed on BC (10)-07. In addition, they will be reflectorized, as described. All labor and materials will be considered subsidiary to the pertinent Items.

Repair barricades 48 hours after barricade report has been delivered to the Contractor. Repair barricades to the satisfaction of the Engineer. Failure to comply will cause all work to cease.

Maintain Sandbags that are used for ballast, as directed. Consider subsidiary to the pertinent Items.

Unless otherwise noted in the plans the Work Zone signs beyond the CSJ project limits shall be ground mounted.

ITEM 506 - TEMPORARY EROSION, SEDIMENTATION, AND ENVIRONMENTAL CONTROLS

Obtain the Engineer's approval for proposed methods used for erosion control before starting each phase of construction.

Double-bag all sandbags used for erosion control items. Consider subsidiary to pertinent Items.

ITEM 512 - PORTABLE CONCRETE TRAFFIC BARRIER

Available for use on this project is:

Portable Concrete Traffic Barrier (PCTB) will be available for pick up within a 70 mile radius of the project site as directed by the Engineer. Load, transport, and unload all neatly stockpiled PCTB to the same location when the barrier is no longer required on the project.

Stockpile the PCTB and connecting hardware within the limits of the project, as directed, or at a location of equal original haul distance, as directed, upon completion of this project. (The original haul distance may include the haul distance from the Supplier, as directed/determined by the Engineer.) Bundle the connecting hardware to prevent theft or loss at a storage facility designated by the Engineer. Point and patch damaged barrier as directed.

Consider any PCTB, which needs to be relocated or realigned, for any of various reasons, by a horizontal distance of 12 feet or less, subsidiary to the pertinent items, unless otherwise agreed with the Engineer in writing. If new placement is different, vertically, from the original locations, then payment will be made as "Move."

Any increase in temporary barrier quantities that occur due to Contractor changes in the sequence of work or the traffic control plan will not be paid by the State, unless agreed to, in writing, before the change occurs.

ITEM 530 – INTERSECTIONS, DRIVEWAYS, AND TURNOUTS

Notify property owners a minimum of 48 hours in advance of beginning work on their driveways.

Provide access, at all times, to adjacent property. Construct driveways one-half sections, to allow access.

Do not completely close driveways for reconstruction purposes, unless a reasonable alternate access exists to the property, as approved.

ITEM 540 - METAL BEAM GUARD FENCE

Adjust the limits of the Metal Beam Guard Fence (MBGF) to meet field conditions, as directed, before erection.

Furnish new, round, domed and unpainted timber posts. Furnish steel posts at locations where the minimum embedment shown on the plans for wooden posts cannot be achieved. Field verify the steel post lengths before fabrication. Consider the steel posts subsidiary to pertinent Items.

Install all permanent MBGF and delineators, when the roadway is constructed in one-half widths, on that section before opening the road to traffic.

ITEM 545 - CRASH CUSHION ATTENUATORS (CCA)

When CCA's are Contractor supplied and they are not called to be placed in a permanent location, retain the CCA's as Contractor property, at the end of the project.

ITEM 560 - MAILBOX ASSEMBLIES

Supplement each new mailbox installation with Type 2 object marker placed on the mailbox support in a vertical position 6 in. below the bottom of the mailbox.

Reflective tape may be used to simulate a Type 2 marker on tubular supports. Use tape that meets DMS-8600. The simulated marker will consist of three 2¾-inch x 2¾-inch pieces of yellow high intensity tape spaced 1 inch apart.

The Type 2 marker will consist of OM-2SR or OM-2VP object markers if delineator post supports are used. Bi-directional brackets may be required on Size 2 mailbox installations. Consider subsidiary to the pertinent Items.

ITEM 644 - SMALL ROADSIDE SIGN SUPPORTS AND ASSEMBLIES

Fabricate all small signs not detailed on the plans in conformance with the latest edition of the "Standard Highway Sign Designs for Texas."

ITEM 662, 666, & 672 PAVEMENT MARKERS & MARKERS

Notify the Engineer at least 24 hours in advance of removing existing striping and placing pavement markings & markers.

ITEM 662 - WORK ZONE PAVEMENT MARKINGS

Place temporary pavement markings each night, as directed. Temporary flexible-reflective tabs will not be allowed as temporary pavement marking on the various roadways, unless otherwise approved

Remove work zone pavement markings within 48 hours after permanent striping has been completed.

Foil backed pavement markings will not be allowed.

ITEM 666 - REFLECTORIZED PAVEMENT MARKINGS

Apply Type I ReflectORIZED Pavement Markings no sooner than 7 days after applying the final course of HMACP, unless otherwise directed.

Reference existing channel islands, gores, and lane striping before commencing work. Provide referencing that will include a sketch of the layout to the Engineer. Obtain approval for placement of guidemarks from the Engineer before to installing any permanent pavement markings. Consider subsidiary to the pertinent Items.

ITEM 672 - RAISED PAVEMENT MARKERS

Place the bituminous adhesive at a temperature range of 380°F to 390°F. Place the pavement marker on the bituminous adhesive approximately 20 seconds after the adhesive is placed on the pavement. Ensure the pavement marker rests solely on the adhesive and not the pavement surface. Ensure that a minimum of 1/8 in. layer of bituminous adhesive remains between the pavement marker and the pavement surface.

ITEM 677 - ELIMINATING EXISTING PAVEMENT MARKINGS AND MARKERS

Remove and dispose of, off the right of way, any existing raised pavement markings before beginning surfacing operations. Remove the existing traffic buttons and pavement markers, daily, as work progresses and as directed. Consider subsidiary to the pertinent Items.

Black paint will not be allowed. Acceptable methods will be sand blasting (Blasting Method) or strip sealing (Surface Treatment Method).